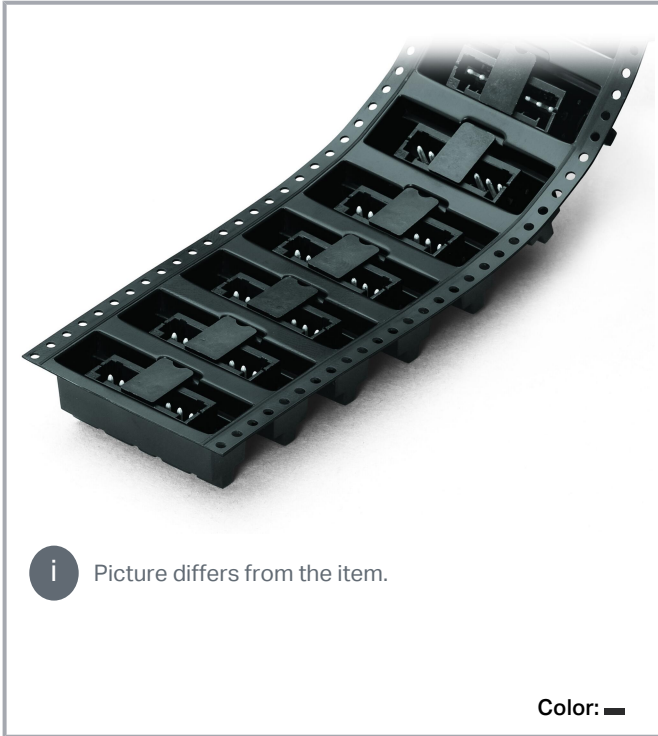


Data sheet | Item number: 733-333/105-604/997-446

THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 2.5 mm; 3-pole; black

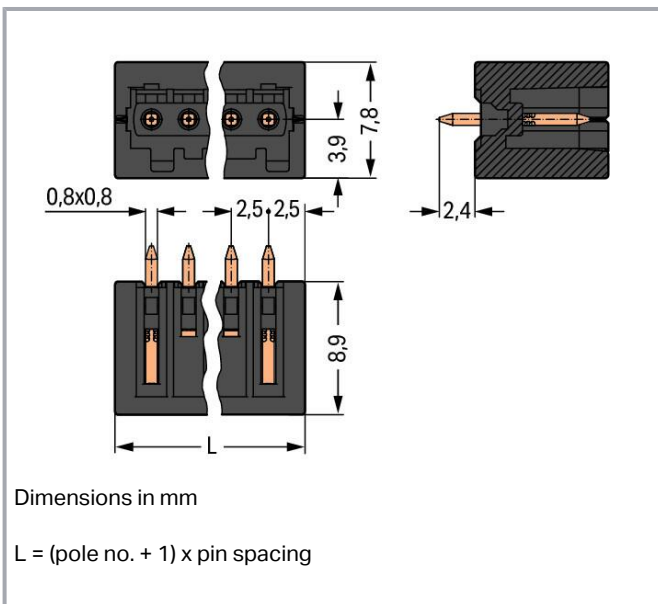
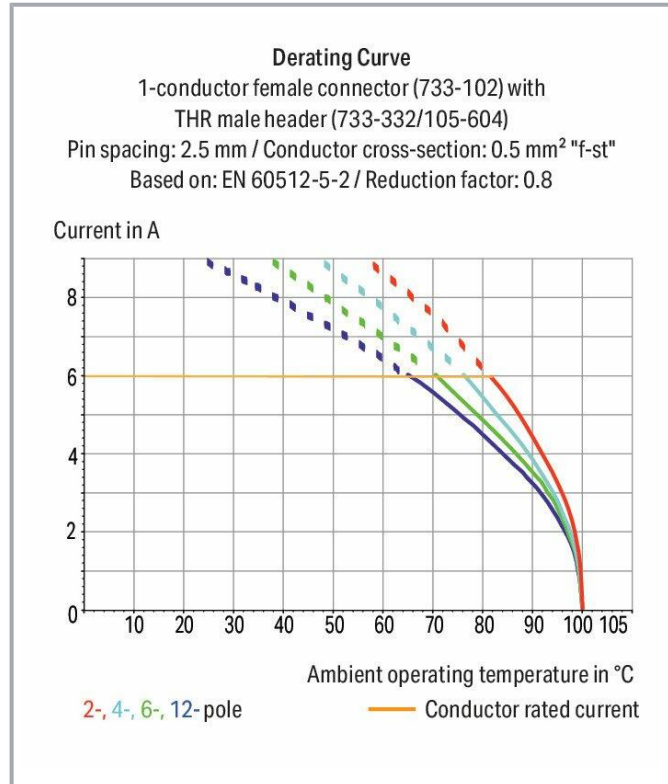


[www.wago.com/733-333/105-604/997-446](http://www.wago.com/733-333/105-604/997-446)



 Picture differs from the item.

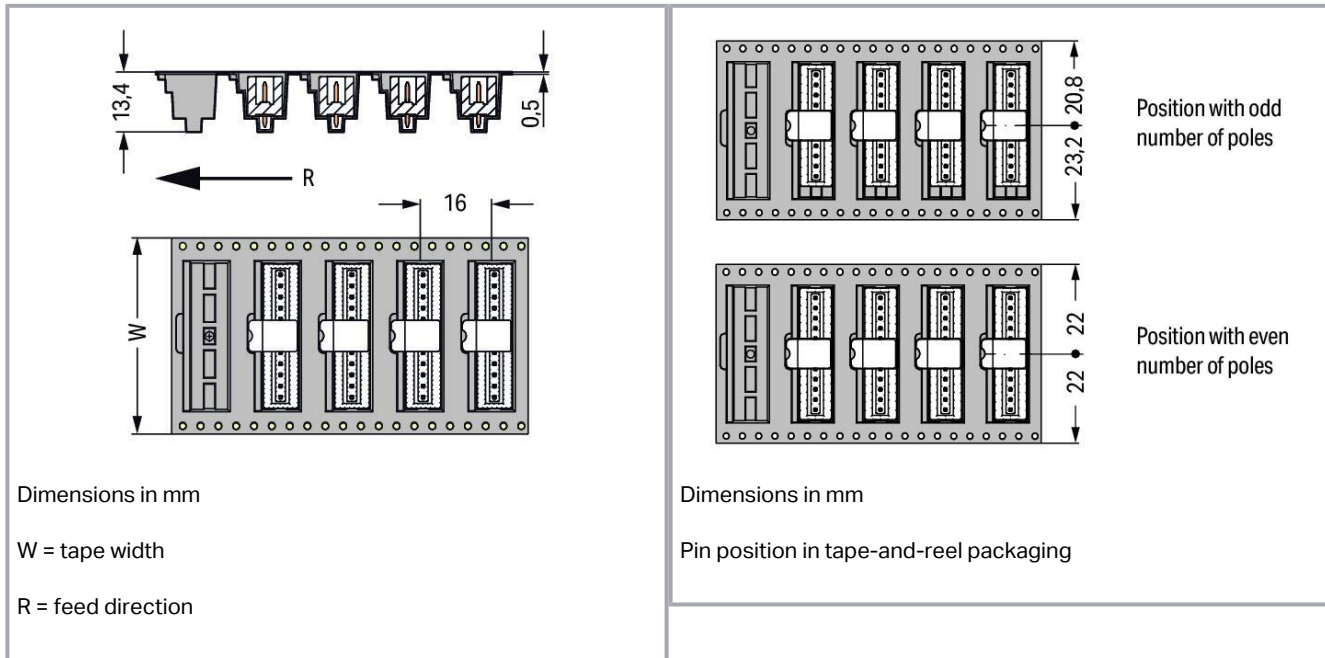
Color: 



Subject to changes. Please also observe the further product documentation!

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## Item description

- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly
- Optimal thermal penetration via pin enclosure design provides lower soldering temperatures
- 100% protected against mismatching
- Coding option available

## Data

### Notes

#### Safety information

The *MCS – MULTI CONNECTION SYSTEM* includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected /disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

#### Variants:

Other pole numbers  
 Other solder pin lengths  
 Gold-plated or partially gold-plated contact surfaces  
 Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Subject to changes. Please also observe the further product documentation!



## Electrical data

### Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	80 V
Rated impulse voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated impulse voltage (III/2)	2.5 kV
Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	6 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

### Ratings per UL 1059

Approvals per	UL 1059
Rated voltage UL (Use Group B)	150 V
Rated current UL (Use Group B)	4 A

### Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group B)	150 V
Rated current CSA (Use Group B)	4 A

## Connection data

Total number of potentials	3
Number of connection types	1
Number of levels	1

### Connection 1

Pole number	3
-------------	---

## Physical data

Pin spacing	2.5 mm / 0.098 inches
Width	10 mm / 0.394 inches
Height	11.3 mm / 0.445 inches
Height from the surface	8.9 mm / 0.35 inches

Subject to changes. Please also observe the further product documentation!



Depth	7.8 mm / 0.307 inches
Solder pin length	2.4 mm
Solder pin dimensions	0.8 x 0.8 mm
Plated through-hole diameter (THR)	1.2 <sup>(+0.1)</sup> mm
Reel diameter of tape-and-reel packaging	330 mm
Tape width	44 mm

### Mechanical Data

Variable coding	Yes
Anti-rotation protection	Yes

### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	Yes
Plugging without loss of pin spacing	No
Mating direction to the PCB	90 °

### PCB contact

PCB contact	THR
Solder pin arrangement	over the entire male connector (in-line)
Number of solder pins per potential	1

### Material Data

Note (material data)	Information on material specifications can be found here
Color	black
Material group	I
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	Tin
Fire load	0.016 MJ
Weight	0.7 g
MSL gemäß J-STD 020D	1

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## Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

## Commercial data

eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 8.0	EC002637
ETIM 7.0	EC002637
PU (SPU)	290 pcs
Packaging type	bag
Country of origin	DE
GTIN	4045454814496
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

## Counterpart



### Item no. 733-103

1-conductor female connector; CAGE CLAMP®; 0.5 mm<sup>2</sup>; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; 0,50 mm<sup>2</sup>; light gray

[www.wago.com/733-103](http://www.wago.com/733-103)

## Optional accessories

### Coding

Coding



### Item no.: 733-331

Coding key; snap-on type; black

[www.wago.com/733-331](http://www.wago.com/733-331)

## Downloads

### Documentation

#### Additional Information

Technical Section	2019 Apr 3	pdf	Download
Technical explanations		2.0 MB	

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THR Soldering Process

pdf  
548.2 kB

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## CAD/CAE-Data

### CAD data

2D/3D Models 733-333/105-604/997-446

[URL](#)

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 733-333/105-604/997-446

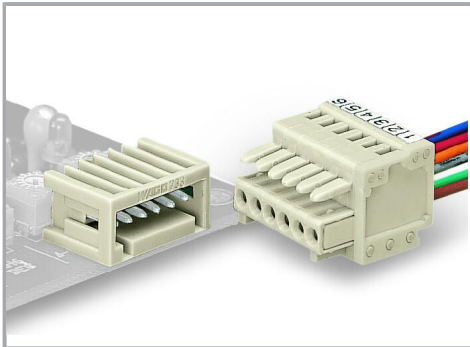
[URL](#)

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THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 2.5 mm; 3-pole; black

## Installation Notes

### Mismatching protection



Male headers and female connectors are 100% protected against mismatching.

Only mating halves with the same pole number can be connected.

### Coding

Subject to changes. Please also observe the further product documentation!

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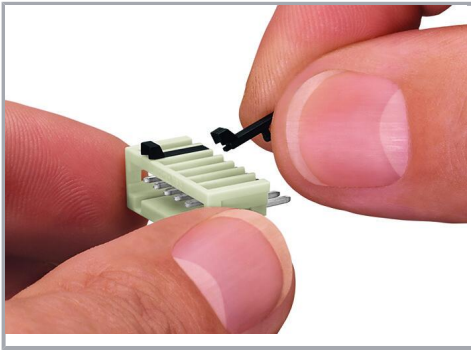
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Coding a male header – fitting coding key(s).

## Product family

**MCS MICRO**

[Show all products from the family](#)

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